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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/647,734 | 08/25/2003 | Joji Iida | 42530-5500 | 2154 |

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EXAMINER

JOERGER, KAITLIN S

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3653

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,734

Applicant(s)

IIDA, JOJI

Examiner

Kaitlin S. Joerger

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-12,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 13-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito et al. (US Patent 4,972,958).

Ito et al. teaches a banknote supply storing section, 19-21; a banknote transporting unit adjacent the storing section for receiving a stored banknote from the banknote storing section; wherein the transporting units includes rollers defining a U-shaped path, see figures 1 and 2; a banknote length detection unit, 11, a dispensing slot 2. Ito further teaches that the banknote supply storing section is inclined at an angle, see figures 1 and 2.

The U-shaped transporting path includes a first roller, 30, 31, or 32, a guiding roller, see left hand side of figure 1, and a second transporting roller, top of figure 1, the rollers defining a U-shaped transporting path. The length sensor, 11, is disposed adjacent the U-shaped path.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. in view of in view of Mochizuki et al. (US Patent 6,536,761) in view of JP 0609241 A, as cited by the applicant.

Ito et al. teaches a banknote supply storing section, 19-21; a bank note discharging unit, 30, 31, or 32 for discharging the banknote from the banknote supply storing section; and a banknote transporting unit; the transporting unit includes a first roller and a first pressing roller disposed adjacent the storing section, the rollers arranged so that their axes of rotation are parallel to each other to conduct a single discharged note between them away from the discharging unit, see figure 1.

He does not teach that the banknote transporting unit transports the banknote at a second speed, which is higher than the first speed of the discharging unit, but the JP-0609241 A patent does teach such a feature. The JP '241 patent teaches a low-speed feed roller with a clutch and a high-speed transporting roller for transporting banknotes away from the storing section, see paragraphs 0002 through 0006.

It would have been obvious to one of ordinary skill in the art to alter the transporting speed of the transports rollers of Ito et al. so that they had a faster speed than the feed rollers as taught by the JP '241 patent, for the purpose of ensuring that there was a gap between the banknotes being fed from the storing section so that the length of the notes could be correctly determined by the sensors and control unit.

Ito et al. also does not teach that the first roller and pressing roller have radial projections, wherein the radial projection of the first roller are interposed in the radial projections of the pressing rollers. Michizuki et al. does teach this feature, see figure 7 and column 3, lines 39+.

It would have been obvious to one of ordinary skill in the art to design the first roller and pressing roller of Abe et al. so that they were comprised of radial projections, where the radial projection of the rollers are interposed between the radial projections of the other rollers in order to deform the banknote for the purpose of ensuring that the note does not become wound around the feed roller during transport. Further it would have been obvious to include six radial projection on both the drive roller and the pressing roller in order to create more of a wavy shape for the purpose of ensuring that the bill travels along the transport path and does not become wound around the drive roller.

With regard to claims 6-10, Ito et al. further teaches a first sensor and second sensor for detecting the presence of a banknote; and a control unit for receiving and processing the first signal and the second signal, to determine whether the banknote has successfully passed through the transporting unit, see column 5, lines 20+. A temporary storage unit, 5, for receiving a predetermined number of discharged banknotes, wherein the predetermined number could be any number, including four and ten, the storage unit being arranged adjacent the transporting unit, see figure 1. The second sensor, 11, is interposed between the banknote transporting unit and the temporary storing section to detect the passage of the discharged banknote into the temporary storing section. The device of Abe et al. further includes a dispensing slot, 2, and a slider member, 6, for pushing banknotes in the temporary storage section out through the dispensing slot.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. in view of Ademmer et al.

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Ito et al. teaches all of the features of the claimed invention, including photoelectric sensors as claimed in claim 12, except for a third sensor for detecting the presence of banknotes at the dispensing slot. Ademmer et al. does teach this feature, he teaches a photoelectric sensor 53, for the purpose of detecting the presence of banknotes in the dispensing slot, see column 3, lines 45+. While Ademmer et al. does not specifically teach an audible alarm that is sound when banknotes remain in the dispensing for an extended period of time, the examiner takes official notice of this feature and contends that such an alarm is very well known in the art. Every conventional banknote dispensing device in use today contains such an audible alarm, and therefore this feature is well known in the art and would have been obvious to include in the dispenser taught by the combination of Ito et al. and Ademmer et al. for the purpose of indicating to the customer that their banknotes are ready to retrieve.

Claim 19 is rejected under 35 U.S.C. 103(a) as being obvious over Ito et al. (US Patent 6,715,671) in view of JP-09060241.

Neither Ito et al. nor the JP-0609241 Patent teach a method for discharging and dispensing a banknote, however, it would have been obvious to one of ordinary skill in the art to perform the method steps claim 19, when using the device taught by the combination of the Ito et al. and the JP '241 patent in its usual and expected fashion.

Specifically, Ito et al. teaches a banknotes discharging device, a banknote transporting device, a banknote length sensor, a control unit to compare the sensed banknote length to determine if a banknote is acceptable, a temporary storing section, and a diverting and reject

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section. The JP '241 patent teaches a discharge device and a transporting device which transports the banknotes at a speed faster than that which they are discharged.

It would have been obvious to combine the high speed transporting device of the JP '241 patent with Abe et al., as outline in the above paragraphs, in order to ensure that there was a gap between the banknotes being fed from the storing section so that the length of the notes could be correctly determined by the sensors and control unit.

While neither of these patents teach a method for discharging and dispensing a banknote, it would have been obvious to one of ordinary skill in the art to perform the method steps of claim 19 when using the apparatus taught by the combination of Abe et al. and the JP '241 patent in it usual and expected fashion as the combination teaches a device for dispensing and discharging banknotes that performs all of the steps of the claimed method.

Allowable Subject Matter

Claims 4 and 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

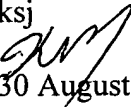
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaitlin S. Joerger whose telephone number is 571-272-6938. The examiner can normally be reached on Monday - Friday 9-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ksj


30 August 2006



**PATRICK MACKEY
PRIMARY EXAMINER**